

CLAIMS

What is claimed is:

- 5 1. A method of playing back a recorded signal, comprising:
 obtaining a recording identifier corresponding to the recorded signal;
 comparing the recording identifier with previously stored identifiers in
a playback preference database; and
 reproducing the recorded signal using previously stored preferences if
the recording identifier is found in the playback preference database and using default
10 preferences if the recording identifier is not found in the playback preference
 database.
2. A method as recited in claim 1, further comprising:
 obtaining playback preferences during said reproducing; and
 storing the playback preferences in the playback preference database.
3. A method as recited in claim 2, wherein the playback preferences include
audio control settings.
4. A method as recited in claim 3, wherein the audio control settings include
programmable effects.
5. A method as recited in claim 4, further comprising obtaining the recorded
signal from a compact disc.
6. A method as recited in claim 4, further comprising obtaining the recorded
signal from a file of digitally encoded audio on a computer readable medium.

RULE 1.126

CONT'D

~~7~~. A method as recited in claim 4, further comprising obtaining the recorded signal from a file of digitally encoded audio on a computer readable medium.

~~8~~. A method as recited in claim 6, wherein the file of digitally encoded using ISO-MPEG Audio Layer-3.

~~9~~. A method as recited in claim 6,
wherein the computer readable medium is a computer mass storage device, and
wherein said method further comprises:
detecting changes in software available to playback the recorded signal, and
automatically downloading the software to playback the recorded signal.

~~10~~. A method as recited in claim 4, wherein the programmable effects are surround sound effects.

~~11~~. A method as recited in claim 3, wherein the audio control settings include at least one of echo, reverberation, loudness, speed and direction.

~~12~~. A method as recited in claim 2, further comprising obtaining the recorded signal from a digital versatile disc.

~~13~~. A method as recited in claim 11, wherein the playback preferences include at least one of audio and video control settings.

~~14~~. A method as recited in claim 12, wherein the playback preferences include surround sound mode.

~~15~~. A method as recited in claim 12, wherein the playback preferences include language of audio in the recorded signal.

~~16~~. A method as recited in claim 12, wherein the playback preferences include content rating.

RULE 1.126

CONT'D

17

~~16.~~ A method as recited in claim 12, wherein the playback preferences include at least one viewing angle.

18

~~17.~~ A method as recited in claim 12, wherein the playback preferences include video output mode.

19

~~18.~~ A method as recited in claim 11,
wherein the default preferences include at least one of surround sound mode, language of audio in the recorded signal, and video output format, and
wherein as many of the default preferences are used as available on the
5 digital versatile disc if the recording identifier is not found in the playback preference database.

20

~~19.~~ At least one computer program stored on a computer-readable medium, embodying a method of playing back a recorded signal, comprising:
obtaining a recording identifier corresponding to the recorded signal;
comparing the recording identifier with previously stored identifiers in
5 a playback preference database; and
reproducing the recorded signal using previously stored preferences if the recording identifier is found in the playback preference database and using default preferences if the recording identifier is not found in the playback preference database.

21

~~20.~~ At least one computer program as recited in claim 19, further comprising:
obtaining playback preferences during said reproducing; and
storing the playback preferences in the playback preference database.

22

~~21.~~ At least one computer program as recited in claim 20, wherein the playback preferences include audio control settings.

23

~~22.~~ At least one computer program as recited in claim 21, wherein the audio control settings include programmable effects.

24

~~23.~~ At least one computer program as recited in claim 22, further comprising obtaining the recorded signal from a compact disc.

Sub A2

RULE 1.126
CONT'D

25

~~24.~~ A method as recited in claim 22, further comprising obtaining the recorded signal from a file of digitally encoded audio on a computer readable medium.

26

~~25.~~ At least one computer program as recited in claim 24, wherein the file of digitally encoded using ISO-MPEG Audio Layer-3.

27

~~26.~~ At least one computer program as recited in claim 24,
wherein the computer readable medium is a computer mass storage device, and
wherein said method further comprises:
detecting changes in software available to playback the recorded signal, and
automatically downloading the software to playback the recorded signal.

28

~~27.~~ At least one computer program as recited in claim 22, wherein the programmable effects are surround sound effects.

29

~~28.~~ At least one computer program as recited in claim 21, wherein the audio control settings include at least one of echo, reverberation, loudness, speed and direction.

30

~~29.~~ At least one computer program as recited in claim 20, further comprising obtaining the recorded signal from a digital versatile disc.

31

~~30.~~ At least one computer program as recited in claim 29, wherein the playback preferences include at least one of audio and video control settings.

32

~~31.~~ At least one computer program as recited in claim 30, wherein the playback preferences include surround sound mode.

33

~~32.~~ At least one computer program as recited in claim 30, wherein the playback preferences include language of audio in the recorded signal.

RULE 1.126
CONT'D

34

~~33.~~ At least one computer program as recited in claim 30, wherein the playback preferences include content rating.

35

~~34.~~ At least one computer program as recited in claim 30, wherein the playback preferences include at least one viewing angle.

36

~~35.~~ At least one computer program as recited in claim 30, wherein the playback preferences include video output mode.

37

- ~~36.~~ At least one computer program as recited in claim 29,
wherein the default preferences include at least one of surround sound mode, language of audio in the recorded signal, and video output format, and
wherein as many of the default preferences are used as available on the
5 digital versatile disc if the recording identifier is not found in the playback preference database.

38

- ~~37.~~ At least one database stored on a computer-readable medium, comprising:
a playlist identifier for each playlist;
an order within the playlist for a recorded signal;
a disc identifier when the recorded signal is obtained from a digitally
5 encoded disc;
a filename when the recorded signal is obtained from a digitally encoded file on a mass storage device; and
playback preferences for reproducing the recorded signal.

39

~~38.~~ At least one database stored on a computer-readable medium as recited in claim 37, further comprising a table containing playlist records, each playlist record including the playlist identifier.

40

~~39.~~ At least one database stored on a computer-readable medium as recited in claim 38, further comprising a plurality of song records containing identical playlist identifiers and different order values, with a first song record containing the disc identifier and a second song record containing the filename.

RULE 1.126
CONCL.

⁴¹
~~40.~~ At least one database stored on a computer-readable medium as recited in claim 39, wherein each playlist record further comprises
an image filename;
a content producer; and
a genre descriptor.

⁴²
~~41.~~ At least one database stored on a computer-readable medium as recited in claim 39,
wherein said song records further include a track number, and
wherein said at least one database further comprising a plurality of
5 records containing

the disc identifier in one of the song records;
the track number in the one of the song records;
amount of a track to play; and
playback preferences for the track.

⁴³
~~42.~~ At least one database stored on a computer-readable medium as recited in claim 41, wherein the playback preferences include at least one of surround sound mode, echo, reverberation, loudness, speed and direction.

⁴⁴
~~43.~~ At least one database stored on a computer-readable medium as recited in claim 41,
wherein the recorded signal includes video content, and
wherein the playback preferences include at least one of surround sound mode, language of audio in the recorded signal, and video output format.

⁴⁵
~~44.~~ At least one database stored on a computer-readable medium as recited in claim 43,
wherein the recorded signal is obtained from a digital versatile disc in a playback device, and
5 wherein said at least one database stores more disc identifiers than stored in the playback device.

⁴⁶
~~45.~~ A method of controlling audio/video devices, comprising:

- selecting a first source from among inputs including at least two of a computer file, a computer data connection, a digitally encoded disc player, a radio tuner, a television audio decoder, an MPEG decoder, a S/PDIF input, a microphone,
- 5 an external video signal and an external audio signal;
- selecting a first output for the first source from among outputs including a computer mass storage device and at least one of speakers, headphones, an audio tape device, and a video tape device; and
- routing the first source to the first output.

47. A method as recited in claim 45, further comprising:
- selecting a second source of input from among the inputs not selected as the first source;
- selecting a second output from among the outputs not selected for the
- 5 first output; and
- routing the second source to the second output.

48. A method as recited in claim 45, further comprising:
- selecting a second source of input from among the inputs not selected as the first source; and
- mixing the first and second sources of input prior to routing both to the first output.

49. A method as recited in claim 45, further comprising:
- selecting up to three additional sources of input;
- determining amount of mixing of the first source and the three additional sources; and
- 5 routing the first source and the three additional sources to the first output and up to three additional outputs with the amount of mixing previously determined.

50. A method as recited in claim 45,
- wherein said selecting selects an audio only source as the first source,
- wherein said routing routes the first source to said speakers, and

wherein said method further comprises routing a video signal from a
5 video source to a video output device simultaneously with said routing of the first
source to said speakers.

51. An apparatus controlling audio/video devices, comprising:
a source selection circuit to select a first source from among inputs
including at least two of a computer file, a computer data connection, a digitally
encoded disc player, a radio tuner, a television audio decoder, an MPEG decoder, a
5 S/PDIF input, a microphone, an external video signal and an external audio signal;
an output selection circuit to select a first output for the first source
from among outputs including a computer mass storage device and at least one of
speakers, headphones, an audio tape device, and a video tape device; and
a multiplexer circuit to route the first source to the first output.

52. A method of providing a graphical user interface for an audio/video
control device, comprising:
receiving a source selection signal from a remote control identifying a
selected source from among at least two of a playlist database, a computer data
5 connection database, a digitally encoded disc player, a radio tuner, a television audio
decoder, an MPEG decoder, a S/PDIF input, a microphone, an external video signal
and an external audio signal;
displaying on a video display device a first graphical user interface for
the selected source;
10 receiving user commands indicating control operations of the selected
source;
translating the user commands into device commands for the selected
source; and
transmitting the device commands to the selected source.

53. A method as recited in claim 52, further comprising:
receiving a new source selection signal from the remote control
identifying a newly selected source;
displaying on the video display device a second graphical user interface
5 for the newly selected source;

receiving new user commands indicating control operations of the newly selected source;

translating the new user commands into new device commands for the newly selected source; and

10 transmitting the new device commands to the newly selected source.

54. A method as recited in claim 52, further comprising:

receiving a destination identification signal from the remote control identifying a destination device for signals from the selected source;

5 automatically issuing commands to control the destination device; and routing the signals from the selected source to the destination device.

54. A method as recited in claim 52, further comprising: